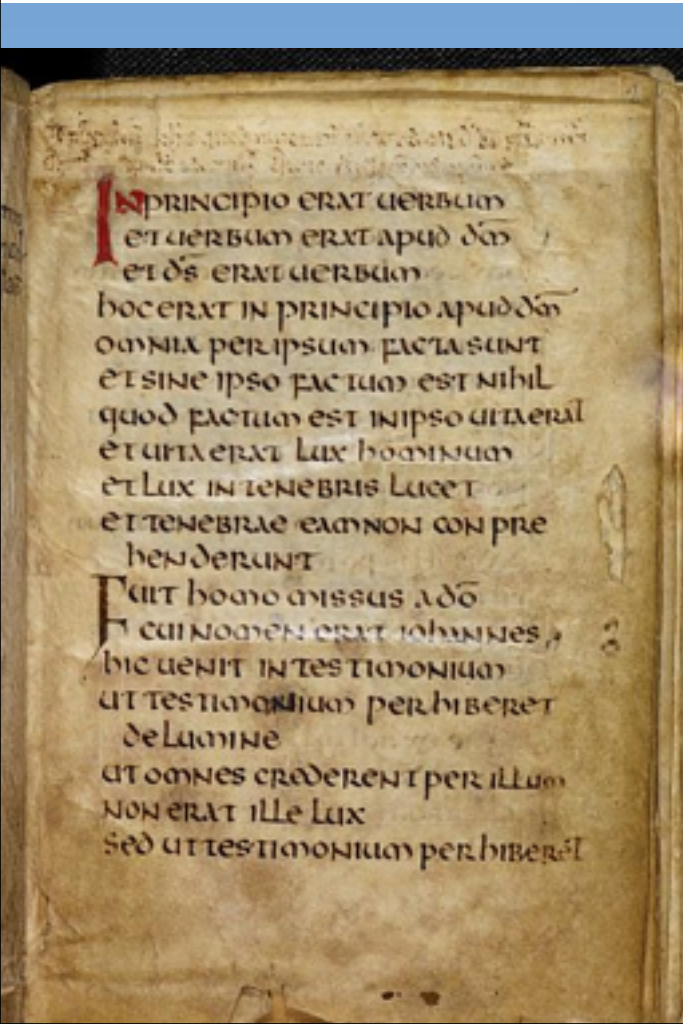




manuscript "culture"



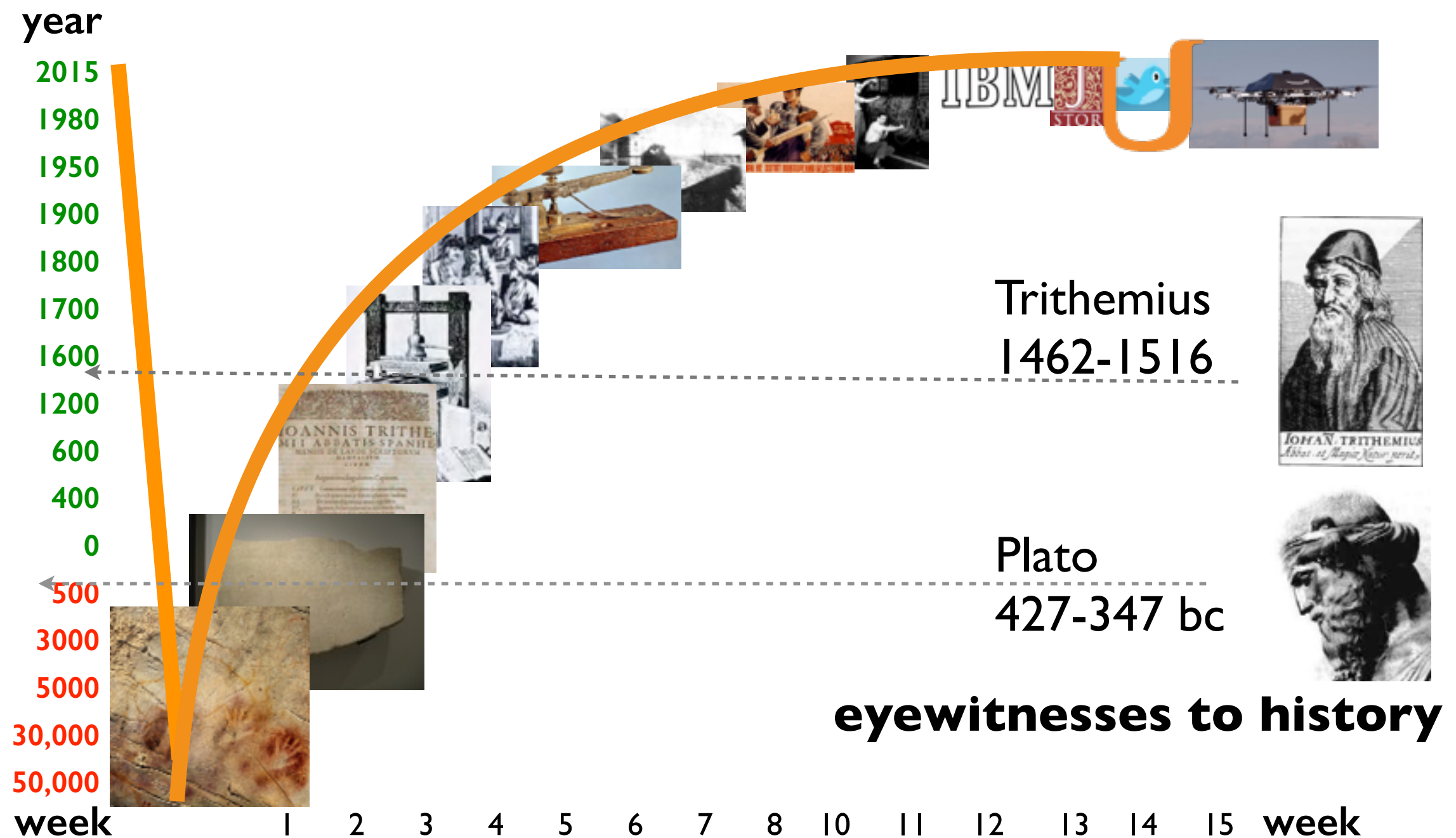
the authority of the text
and a “missing revolution”



history of information
February 6, 2014



where we're going



new technologies

how to think about determinism

what happened?

what was involved?

what did (or did not) come before?

what did (or did not) follow?

what did (or did not) contribute?

what happened elsewhere?

what's likely to be underestimated?

what was necessary, what sufficient?

unintended consequences?

overview

eyewitnesses

technologies of the book

authority of the book

unintended consequences

now/then

eyewitnesses

technologies of the book

authority of the book

unintended consequences



**PLATO SAID THE WRITTEN WORD WAS
PRONE TO MISINTERPRETATION.
EXHIBIT A: ALTERNATIVE INVESTMENTS.**

Plato warned us about the ambiguity of words. So he wouldn't be surprised to learn that investment jargon can often be misconstrued.

At AllianceBernstein, our philosophy couldn't be clearer. We believe every investor should understand how investments like alternatives work — and what they might bring to a portfolio.

For decades, we've worked hard to untangle the



intricacies of capital markets and to develop a wide range of diversification strategies. Of course, we couldn't do either without deep research and investment capabilities.

It doesn't matter how well-crafted something is if it doesn't make sense to you. See how we can help simplify the complex nature of non-traditional mutual funds. Visit us at alliancebernstein.com/go/alts.



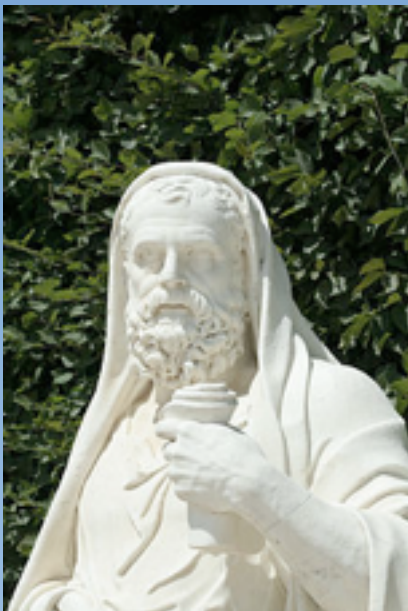
Plato's perspective

eyewitnesses

technologies

authority

consequences



that "new technology" -- writing

cast of characters

Socrates

Phaedrus

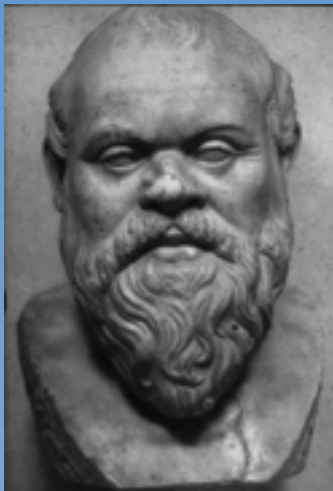
Lysias

Thamus

Theuth

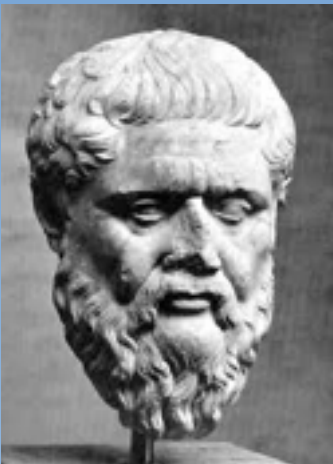
Thebes

the standard view?



Socrates didn't like books

"I am a lover of learning ... Men lead hungry animals by waving a branch or some vegetables before their noses, and it looks as if you will lead me all over Attica and anywhere else you please ... by waving the leaves of a speech [book] in front of me"



"Plato ...had such a love of books that he bought three books ... at the price of 10,000 denarii. Aristotle ... acquired a few books for three Attic talents which amounts to 72,000 nummii."



what good is writing?



Theuth: "An accomplishment ... which will improve both the wisdom and the memory of the Egyptians ..."

Thamus: "The discoverer of an art is not the best judge of the good or harm which will accrue to those who practice it. ... Those who acquire it will cease to exercise their memory and become forgetful; they will rely on writing to bring things to their remembrance by external signs instead of on their own internal resources."

Thamus updated?

Published Online July 14 2011
Science 5 August 2011:
Vol. 333 no. 6043 pp. 776–778
DOI: 10.1126/science.1207745

[< Prev](#) | [Table of Contents](#) | [Next](#)

REPORT

Google Effects on Memory: Cognitive Consequences of Having Information at Our Fingertips

Betsy Sparrow^{1,*}, Jenny Liu², Daniel M. Wegner³

[±](#) Author Affiliations

[±](#)*To whom correspondence should be addressed. E-mail: sparrow@psych.columbia.edu

ABSTRACT

The advent of the Internet, with sophisticated algorithmic search engines, has made accessing information as easy as lifting a finger. No longer do we have to make costly efforts to find the things we want. We can “Google” the old classmate, find articles online, or look up the actor who was on the tip of our tongue. The results of four studies suggest that when faced with difficult questions, people are primed to think about computers and that when people expect to have future access to information, they have lower rates of recall of the information itself and enhanced recall instead for where to access it. The Internet has become a primary form of external or transactive memory, where information is stored collectively outside ourselves.

WHAT THE
INTERNET
IS DOING TO
OUR BRAIN
THE
SHALLOW

Nicholas Carr
AUTHOR OF *THE BIG SWI*



Socratic concerns

Phaedrus

eyewitnesses

technologies

authority

consequences

memory

speeches

rhetoric

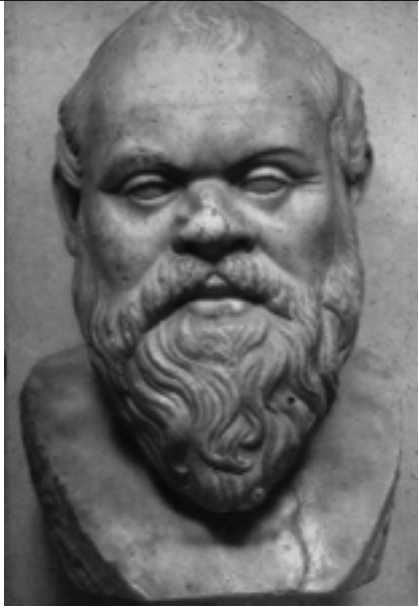
sophists

writing

wisdom

truth [and authority]

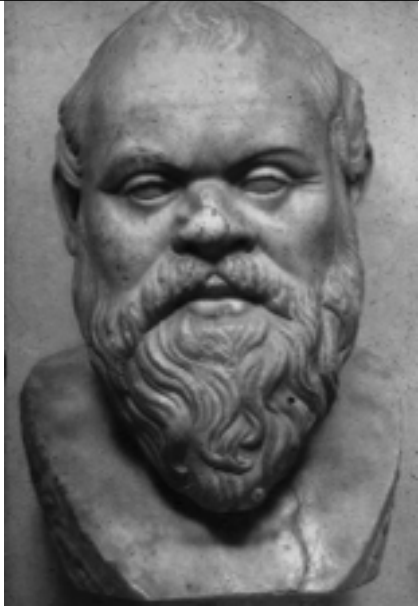
dialectic



writing & wisdom

"**Writing** circulates equally among those who understand the subject and those who have no business with it."

"for **wisdom**, your pupils will have the reputation for it without the reality; they will receive a quantity of information without proper instruction, and in consequence be thought very knowledgeable when they are for the most part quite ignorant."



dialectic & truth

"**Writing** involves a similar disadvantage to painting ... if you ask [words] what they mean ... they simply return the same answer over and over ... writing cannot distinguish between suitable and unsuitable readers ..."

"when a man employs the art of **dialectic**, and, fastening upon a suitable soul, plants and sows in it **truths** accompanied by knowledge ... such truths can defend themselves ..."

"**Written/graven** on the soul of the hearer"



remember?

"But though books are easily procured, yet, even in this age of information, there are thousands in the lower classes that cannot read. Besides, it is a well-known truth, that the same precepts **inculcated by a living instructor, adorned by a proper oratory, enforced by a serious and authoritative manner, produce a powerful effect**, not to be experienced in solitary retirement."

— Vicesimus Knox,
Essays Moral and Literary, 1778

change of mind?

"Give them fair and full **information**, and they will do the thing that is right in consequence of it."

— Vicesimus Knox,
Spirit of Despotism, 1795



dialectics

"The people's University of the Air will have a greater student body than all of our universities put together." --RCA, 1932

eyewitnesses

technologies

authority

consequences

coming up:
social implications



KHANACADEMY
37,956,300 lessons delivered

Watch Videos  Do Exercises Join Us 

The Khan Academy is a not-for-profit 501(c)(3) with the mission of providing a world-class education to anyone, anywhere.

We are complementing Salman's ever-growing library with user-paced exercises—developed as an [open source project](#)—allowing the Khan Academy to become the free classroom for the World.

UDACITY

We believe university-level education can be both high quality and low cost. We're bringing the best teachers to hundreds of thousands of students all over the world.




CS 101: BUILDING A SEARCH ENGINE
Taught by Professor David Evans and Professor Sebastian Thrun

[LEARN MORE](#) 

overview

eyewitnesses (2)

technologies of the book

authority of the book

unintended consequences



the set up

eyewitnesses

technologies

authority

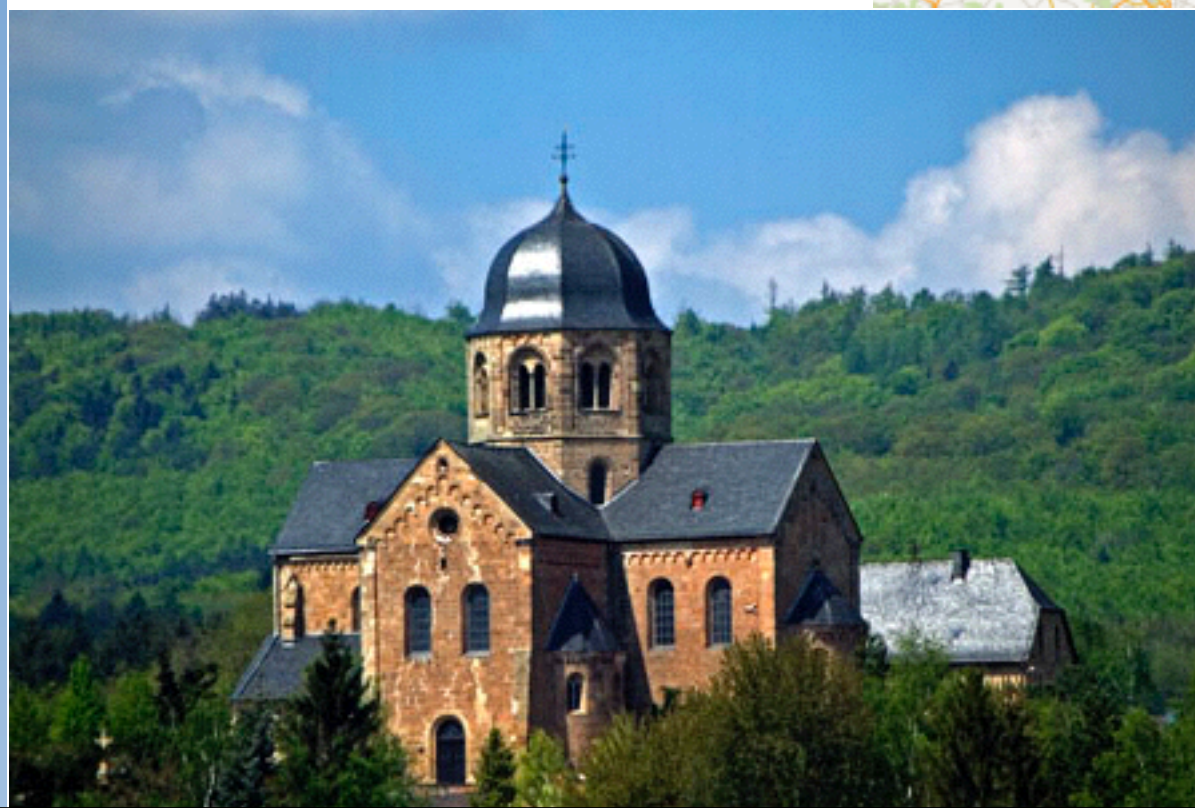
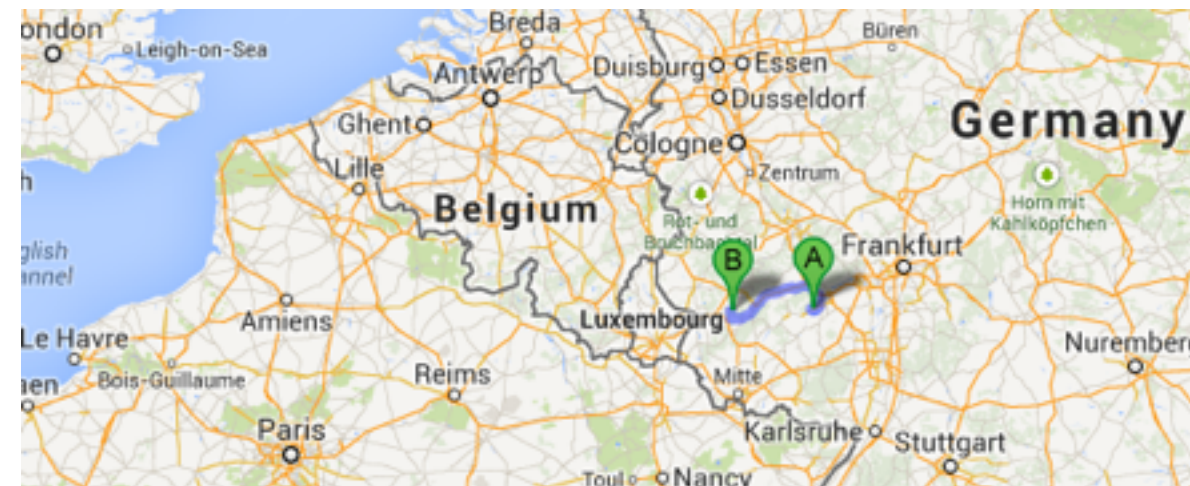
consequences

Trithemius (1462-1516)

native of Trittenheim (B)

Abbot of St Martin's,

Sponheim (A), 1483-1505





the standard view?

Trithemius didn't like print

"It is my greatest pleasure to own and to know all books I ever saw or which I knew to have appeared in print ... To my regret ... money was always lacking ... for the satisfaction of my passion for books."

I 483: 48 books in monastery library

I 505: 2,000





reading between the lines

internal battles

contemplation, manual labor, preaching

vs

scribal practice - “engraving” through writing

"The dedicated and sincere scribe ... will
not receive less than the preacher"

book collecting

"There are some who reproach lovers of books
for having ... too many"

eyewitnesses

technologies

authority

consequences

Monks "are so
detested that it is
considered bad luck
if one crosses your
path"

Erasmus,
In Praise of Folly,
1511

external battles

humanism & the university

"In the 700 years between the Fall of Rome and the 12th century, it was the monasteries which enjoyed an almost complete monopoly of book production and so of book culture.... from the end of the 12th century a profound transformation took place ... reflected in the founding of the universities and the development of learning."

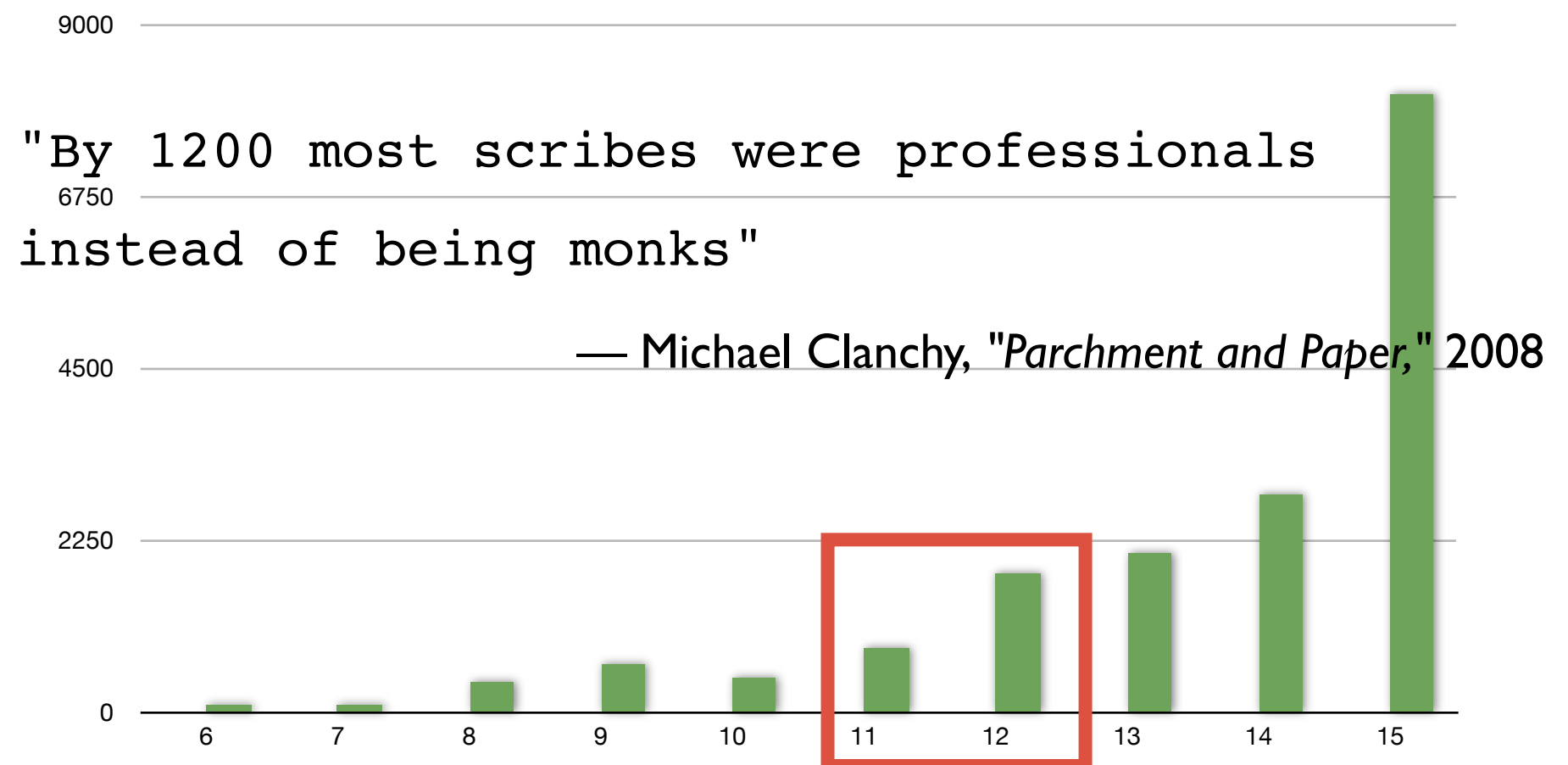
—Febvre & Martin,
The Coming of the Book, 1984





rising demand, but ...

Manuscript Production in Europe, 6th-15th century



Buringh & van Zanden, "Charting the 'Rise of the West': Manuscripts and Printed Books in Europe" *Journal of Economic History* 2009



other concerns

"... not obvious at first ... that printed books would universally supersede the use of manuscripts ..."
Knox, *Essays*, 1782

a reasonable lament?

"The written word on parchment will last a thousand years. The printed word is on paper. How long will it last? The most you can expect of a book of paper to survive is two hundred years. Only time will tell."



how long?

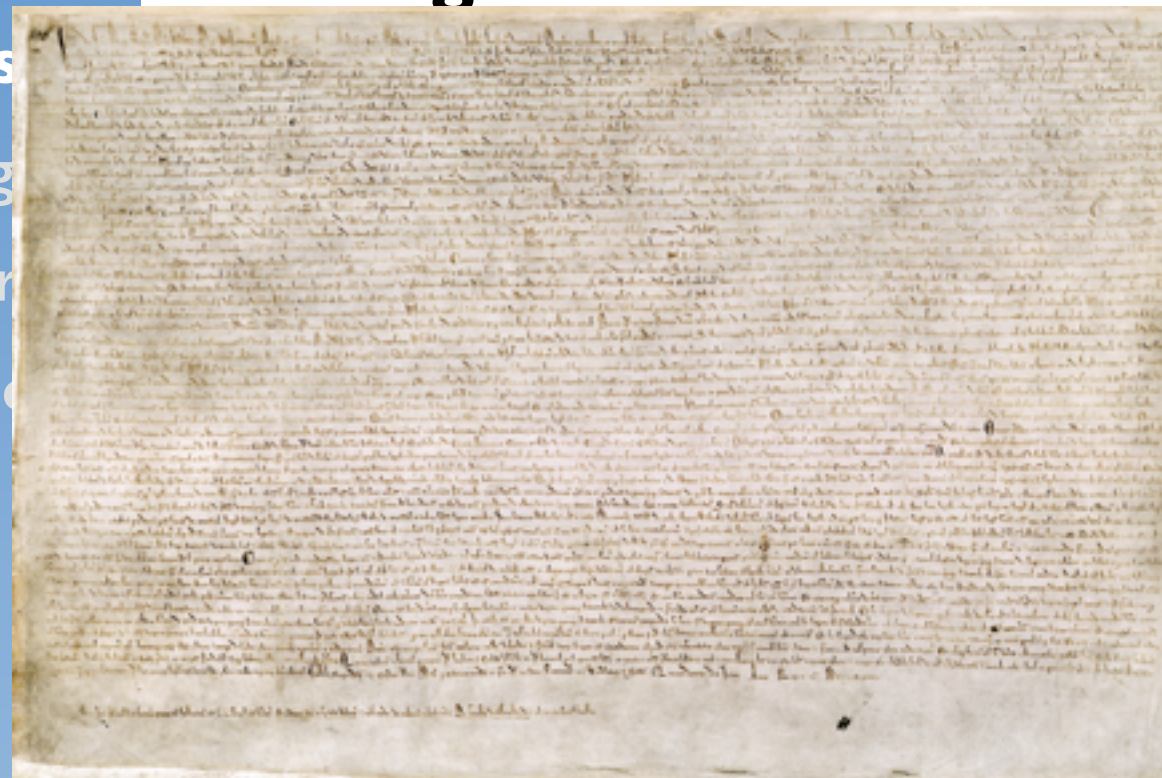
magna carta?

eyewitness

technology

author

consequence



Library (Copy under Revision)	
Hardwicke Library	
702	48
Magna Carta and Laws and Statutes of England]	
14th C	
decorated initials in blue and red, rubrication	
144 vellum leaves, ms on verso and recto. Full early blind-stamped calf. Rebacked	
C91.	

overview

eyewitnesses

technologies of the book

authority of the book

unintended consequences



material matters

stone

clay

wood

wax

parchment/vellum

papyrus

palm

silk

paper

the "immutable mobile"

--Bruno Latour





material changes

geographical determinism?

parchment at Pergamum

papyrus at Alexandria

palm in India (pattachitra)

silk in China



"the parchment alone in a fine Bible,
even allowing for the shorthand
script of the day, represented a flock
of perhaps three hundred sheep"

-- John North, *God's Clockmaker*, 2005

paper

technological leaders?



Ts'ai Lun
62-121

paper

China, 200 bce

Korea, 3d century ce

India, 5th century

Japan, early 7th century

Islam, 8th century

Jews, 10th century

Byzantium, 9th century

-along the "Silk Road"

w. Europe:

Spain 1056 [?]

Italy 1255

France 1348

Germany 1390

Switzerland 1411

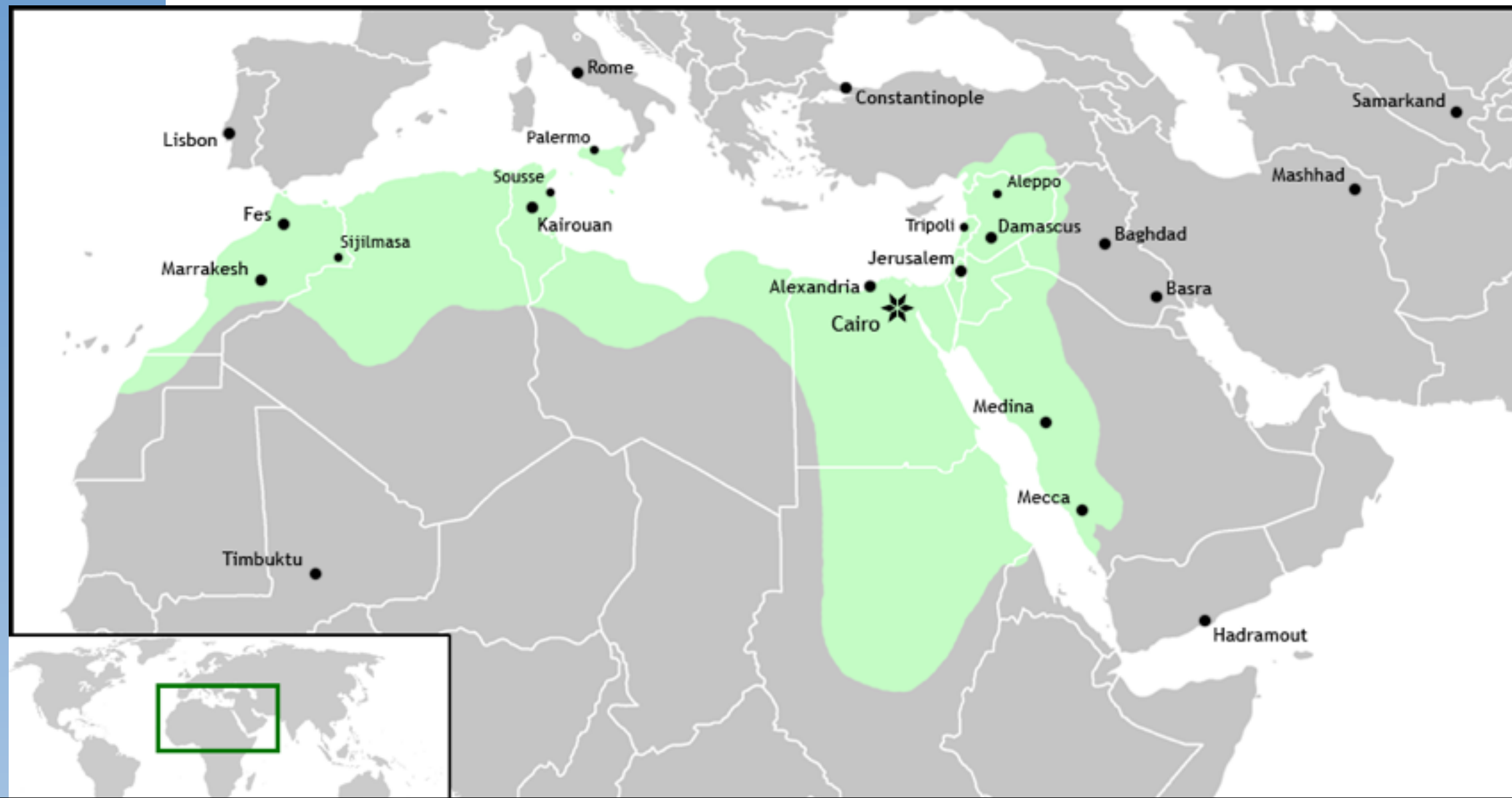
Britain 1494

Russia 1690

USA 1690/1

dark ages

silk road





progress?

"The stone, the palm-leaf, the biblos or bark of the linden tree, the leaden tablet, the papyrus, the parchment, the pugillares ... progressive advancement ... At a very late period, a substance formed of macerated linen ... superior in beauty, convenience, and duration and better adapted to the purposes of literature ... By the ease with which it is procured ... recused the ancient authors from the possibility of oblivion."



–Knox, *Essays*, 1782



missing "revolution"?

rolled to flat

"the revolution between the second and fourth centuries that changed the very structure of the book by substituting the codex for the roll"

--Roger Chartier, *Forms and Meaning*, 1995

"Homerus ... Vergilius ... Cicero ... Titus Livy ... in membranus...quam brevis immensum cepit membrana"

—Martial (c38-103), *Epigrams*

"the pugillares"

—Knox





superior technology?

order of importance?

one handed

two-sided

pagination

marginalia

footnotes

indexes

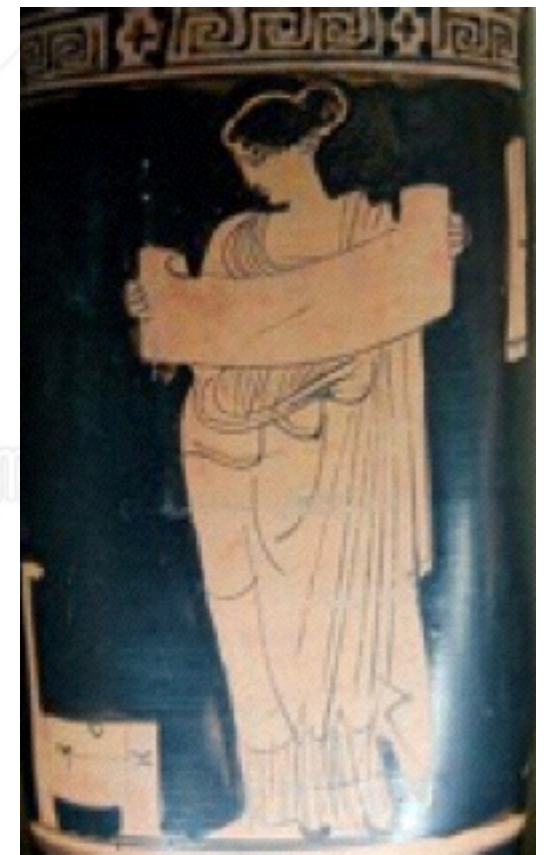
random access





trivializing the past?

**handy
pages
divisions
(incipits,
explicits,
colophons,
sillyboi)**



Edwin Smith Papyrus
c. 1600 bce
NY Academy of Medicine



formal changes

parchment to paper

China, 200 bce

Korea, 3d century

India, 5th century

Japan, early 7th century

Islam, 8th century

Jews, 10th century

Byzantium, 9th century

Western Europe, 11 century

scroll to codex

Christians, 2d century

Islam, 8-9th century

Jews, 8-9th century

China, 9th (butterfly)
13th (thread binding)

Korea, ?12th century (sutra binding)

Japan 18th century

meanwhile ...

to the manor born

Earl's Court Manor Roll, 1554—enrolled, roll call



"Why medieval England ... kept its records predominantly in rolls remains a mystery."

—Clanchy, *From Memory to Written Record*, 1993

scroll to codex

Christians, 2d century

Islam, 8-9th century

Jews, 8-9th century

China, 9th (butterfly)
13th (thread)

Korea, ?12th century
(sutra binding)

Japan 18th century

what does this say of ...?

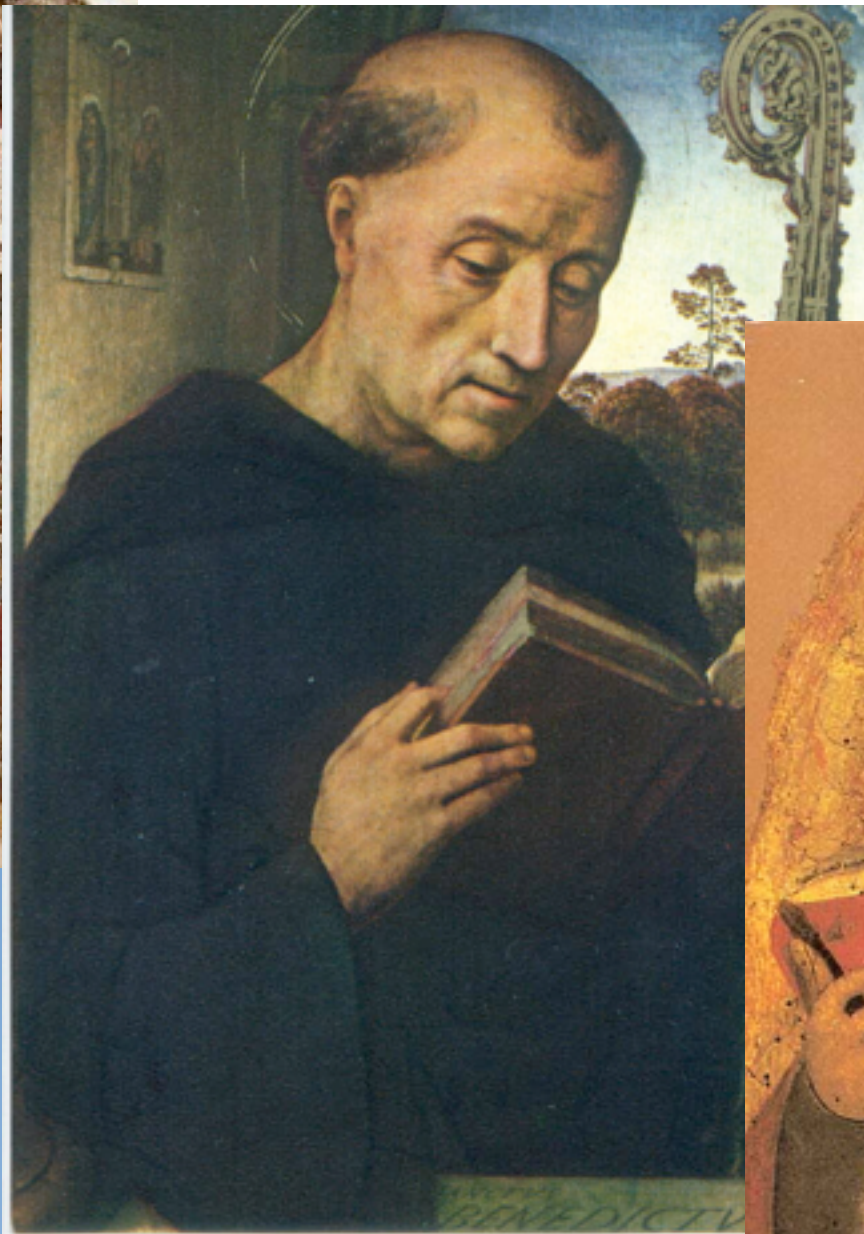
"The **need** for readily available information, which had been steadily rising, was accelerated by the advent of Christianity ..."

"The **need** to find information more rapidly than is possible in a papyrus-roll-form book initiated the development of the Greco-Roman codex in the second century ..."

– Frederick Kilgour,
The Evolution of the Book, 1998



technological triumph?





caveat lector

"In late antiquity, all **authority** was founded on Scripture...and the highest authority, the authority of the church, was represented by the codex."

–Guglielmo Cavallo, *"Du Volumen au Codex,"* 1997

"[P]agans ... continued to regard it as a culturally inferior form. In contrast, the great majority of Christian texts were already in the form of codices."

–Peter Stallybrass, *"Books and Scrolls,"* 2002

"[A Jew] took an oath 'on his roll' ... whereas a Christian swore on the book of the Gospel."

–Michael Clanchy, *"From Memory to Written Record,"* 1993

overview

eyewitnesses

technologies of the book

authority of the book

unintended consequences

written receipts

eyewitnesses
technologies
authority
consequences

"The oldest writings to survive to our time were inscribed five thousand years ago by temple bureaucrats recording economic transactions ... crops, animals, manufactured goods"

-- Lerner, *The Story of Libraries*, 1998

"In the twelfth century... magnates used documents occasionally ... In the thirteenth .. laymen began to convey property to each other by charter; in the latter half ... this practice extended below the gentry class to some peasants.

-- Clanchy, *From Memory to Written Record*, 1993

more sceptical

eyewitnesses

technologies

authority

consequences

Hadith & Isnād

"documenting the authenticity of all transmission of knowledge ... truth does not reside in documents, however authentic, ancient, or well-preserved, but in authentic human beings ... Documents alone, without a line of persons possessed of both knowledge and righteousness ... are useless ... a book ... of no use without ... certification of master"

—Graham, "Traditionalism in Islam," 1993



Henry I (1068/9–1135)

what/who to trust?

Henry I vs Anselm

"We don't accept the evidence of monks
bishops, why should we accept that of a
sheepskin?"



St Anselm (1033–1109)

trustworthy?

eyewitnesses
technologies
authority
consequences

donations of Constantine (c. 750-800)



truthiness

eyewitnesses

technologies

authority

consequences

documentary problems

"If you ask [documents] what they mean ...
they simply return the same answer over and
over again ..."

"Truth is not enough for you; you think it
matters who the speaker is and where he comes
from. ... "

–Phaedrus

medieval contracts

medieval contracts

eyewitnesses
technologies
authority
consequences



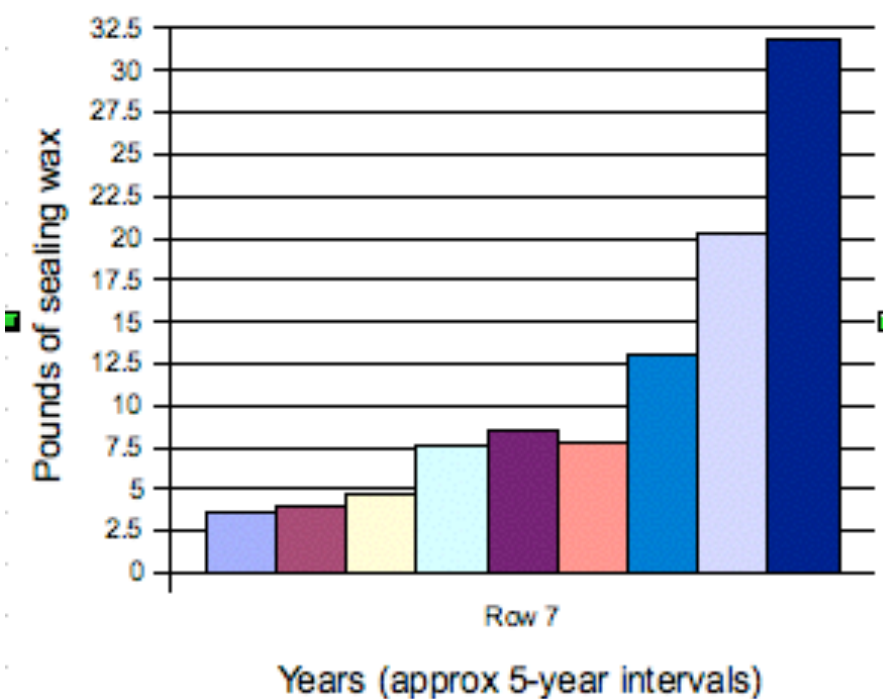
sealing the deal

eyewitnesses
technologies
authority
consequences

text or matter?



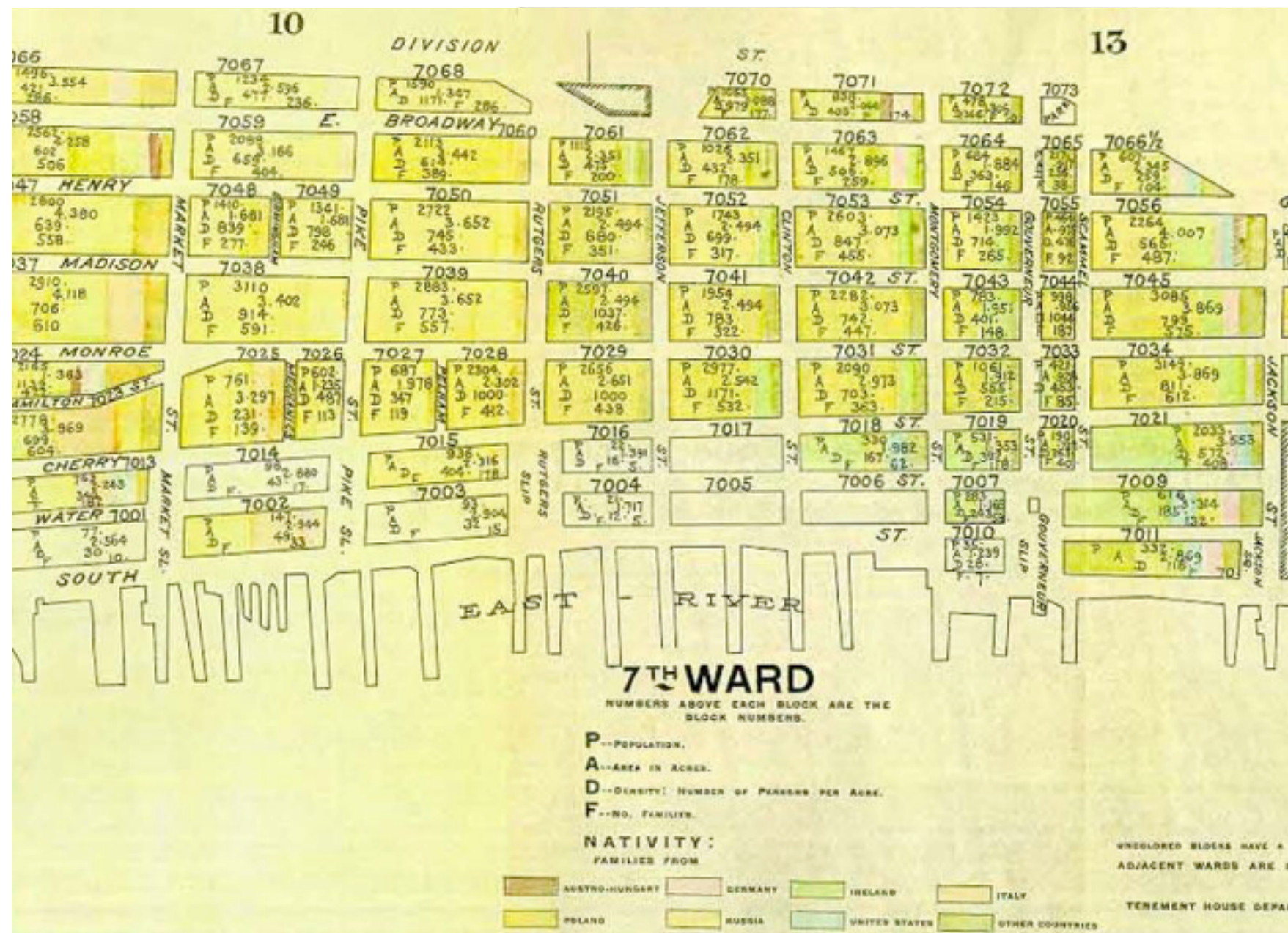
Sealing wax consumption, 1226-1271



chirograph

eyewitnesses
technologies
authority
consequences

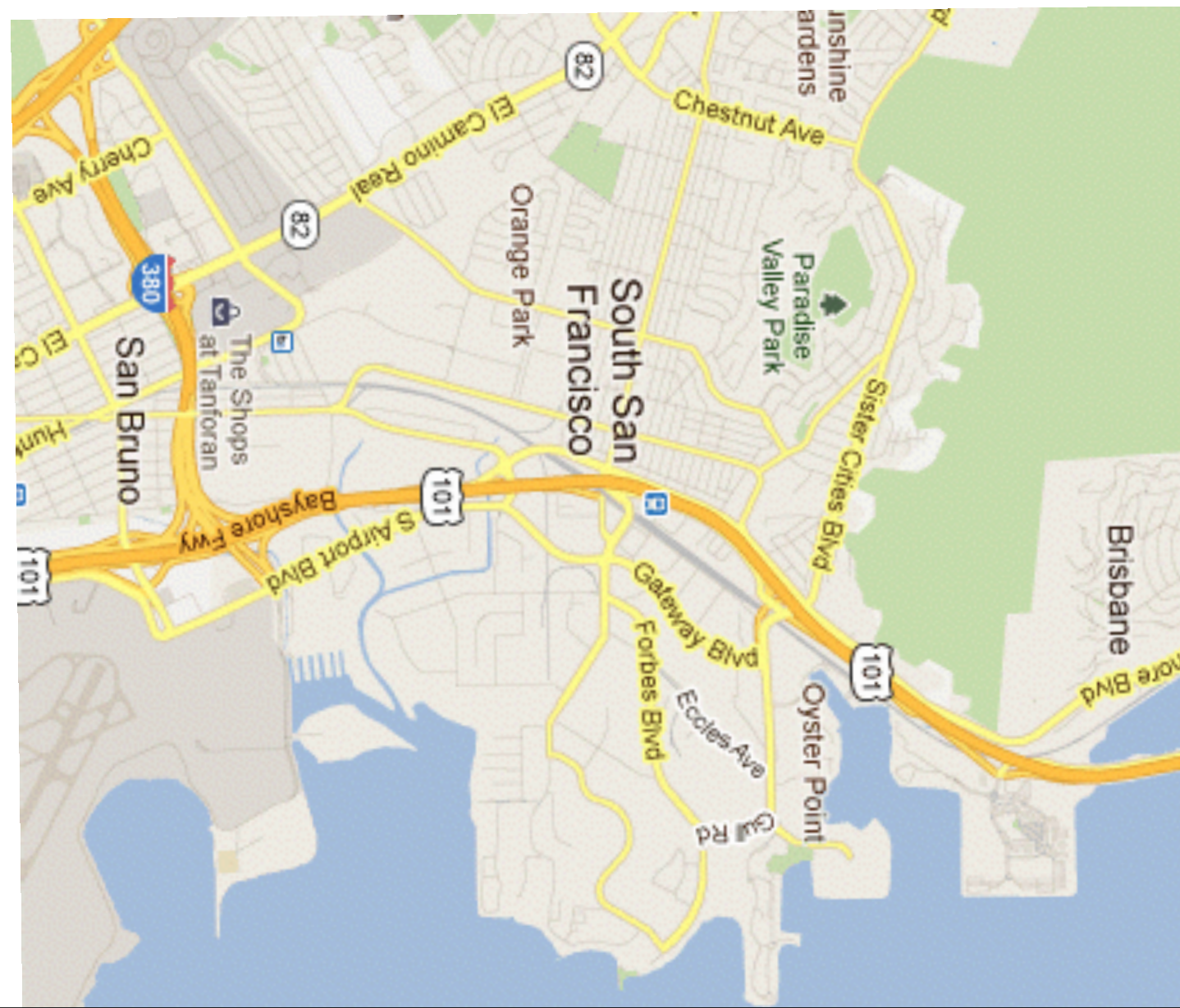
"Fine and Recovery:
Conveyance of
property,
7th Ward NYC, 1793



documenting ownership

eyewitnesses
technologies
authority

Buri Buri land grant 1827-1872



Title:

[Diseño del Rancho Buri Buri : San Mateo Co., Calif.]

Description:

4362 B84On verso: Deposited ... November 30th, 1860.From: U.S. District Court. California, Northern District. Land Case 101 ND, page 481; land case map D-231 (Bancroft Library). José de la Cruz Sanchez, clmt. Pen-and-ink and watercolor.Relief shown by shading.

Creator/Contributor:

United States. District Court (California : Northern District). Land case. 101, Related Name Indexing Term

Date:

1860

Contributing Institution:

UC Berkeley, Bancroft Library

overview

eyewitnesses

technologies of the book

authority of the book

unintended consequences



unintended consequences

quo warranto?

"No document coming from such centres of proved fabrication as Westminster, Evesham, Winchester cathedral, Chertsey and Malmesbury should be accepted at its face value without close examination. ... Ancient monasteries like Chertsey had traditionally forged charters. Now that the king was keeping copies ... abbots ensured that their forged documents were reinforced by inspection in the Chancery and enrollment among the royal records. The Chancery rolls, which were intended to prevent fraud, thus became a means of making forgeries official."

—Clanchy, *From Memory to Written Record*



science of diplomacy

Jean Mabillon (1632-1707)

De Re Diplomatica, 1681

"the Reformation era ... bringing to light thousands of documents .. hitherto inaccessible and unknown. ... France pioneered in this new historical research ... Mabillon Montfaucon."

– James Thompson,
"The Age of Mabillon," 1942



from authority to ...

a guide to forgery

Mabillon "had exposed the fabricated charters of the Carmelite Father Andrew, in a model memorandum which later fell into the forger's hand, and was taken by him to heart with such good effect that he was able with a subsequent fabrication to have his revenge by planting one of his forgeries ... on Mabillon himself"

–David Knowles



"this will kill that"?

manuscript after print

accounting

music

note taking

personal communication

"subversive forms"

a real "revolution"

and so to Gutenberg

(and our first untranslated primary source)



2/11/2014: The Print 'Revolution'

Knox, Vicesimus. 1817, *Essays, Moral and Literary* (seventeenth edition). London.: Charles Dilly.

Read: "Introductory Remarks on the Art of Printing" pp. 76-81; "On the Circumstances which Led to the Discovery of the Art of Printing, with Miscellaneous Remarks on It" pp. 81-87; & "On the Moral, Political, and Religious Effects of Printing, with Concluding remarks" pp 87-96. [pages 85-96 in reader]

Source: Course reader

"How Luther Went Viral." 2011. *The Economist*. December 17.

Read: Entire article

Source: economist.com [hyperlink]

assignment

Based on his essays (and his benefit of hindsight), how would Knox have responded to the arguments of either Plato or Trithemius?